

**References Municipal Energy Concepts**

| <b>Project</b>  | <b>Location</b>                 | <b>Technical Data</b>   | <b>Service UTEK</b>   | <b>Customer</b>              | <b>Year</b>  |
|---|---------------------------------|---|---|------------------------------|--------------|
| <b><i>Energy Concept Bicentenario Santiago de Chile</i></b> | Chile                           | renewable energies for a new city district (70.000 inhabitants) in Santiago de Chile „Ciudad Parque Bicentenario“                                       | data research, dimensioning, economical evaluation, recommendations, report                 | gtz GmbH Eschborn            | 2007         |
| <b><i>New Settlement in Lüneburg</i></b>                    | Lüneburg<br>Niedersachsen       | energy concept within the city planning, conversion of barracks   | data research, dimensioning, economical evaluation, recommendations                         | Stadt Lüneburg               | 2005         |
| <b><i>Energy Concept Neuer/Alter Hafen Bremerhaven</i></b>  | Bremerhaven                     | technical and economical comparison of alternative heating systems, utilization of renewable energies and innovative techniques                         | data research, concept, economical evaluation, recommendations                              | BEAN<br>Bremerhaven          | 2001         |
| <b><i>CO<sub>2</sub>-Balances</i></b>                       | Kiel                            | energy- and CO <sub>2</sub> -balance for the City of Kiel; updating of the CO <sub>2</sub> -balance for the year 2000                                   | data research, concept, report  | Stadt und<br>Stadtwerke Kiel | 1999<br>2002 |
| <b><i>Energy Program for Bremen Country</i></b>             | Land Bremen                     | „Energy Programm for the Country of Bremen“ (Freie Hansestadt Bremen und Stadtwerke Bremen AG)  | consultations   | Land Bremen,<br>Umweltsenat  | 1997<br>1998 |
| <b><i>Building Typologie Schleswig-Holstein</i></b>         | Schleswig-Holstein              | building typologie for Schleswig-Holstein   | data research, energy saving potentials, economical evaluations, in cooperation with GERTEC | Investitionsbank<br>SH       | 1997         |
| <b><i>Energy Agency Weyhe</i></b>                           | Gemeinde Weyhe<br>Niedersachsen | Establishing a municipan energy agency  | concept and consultations   | Gemeinde<br>Weyhe            | 1996         |
| <b><i>Energy Concept Bremen</i></b>                         | Land Bremen                     | scenarios with the stress on cogeneration potentials and renewable energies<br>Szenarien mit den Schwerpunkten KWK-Potentiale und regenerative Energien | data research, recomendations   | prognos AG                   | 1995         |

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|---|---|---|--|---------------------------------|---------------|
| <b>Energy Concept<br/>Malente</b>             | Malente<br>Schleswig-Holstein             | calculation of the CO <sub>2</sub> - relevant energy saving potentials especially in public properties, district heating and RE-potentials  | data research, concepts, potentials, economical evaluations, recommendations Datenerhebung, Konzepte, Potentialerhebungen, Wirtschaftlichkeitsanalyse, Handlungsempfehlungen   | Stadt Malente                   | 1994          |
| <b>Energy Concept<br/>Timmendorfer Strand</b> | Timmendorfer Strand<br>Schleswig-Holstein | calculation of the CO <sub>2</sub> - relevant energy saving potentials especially in public properties, district heating and RE-potentials  | data research, concepts, potentials, economical evaluations, recommendations Datenerhebung, Konzepte, Potentialerhebungen, Wirtschaftlichkeitsanalyse, Handlungsempfehlungen, in cooperation with the energy company | Gemeinde<br>Timmendorfer Strand | 1993<br>-1995 |
| <b>Energy Concept<br/>Delmenhorst</b>         | Stadt Delmenhorst<br>Niedersachsen        | szenarios to the future energy demand, CO <sub>2</sub> -emission reductions, extending the natural gas supply, energetic building typology for municipal properties, cogeneration plant for a former barrack and a hospital | data research, concepts, potentials, economical evaluations, recommendations Datenerhebung, Konzepte, Potentialerhebungen, Wirtschaftlichkeitsanalyse, Handlungsempfehlungen, in cooperation with the energy company | Stadt<br>Delmenhorst            | 1992          |
| <b>Energy Concept<br/>Barth</b>               | Stadt Barth<br>Mecklenbg.-Vorp.           | szenarios to the future energy demand, district heating, energy saving potentials for municipal properties, wind farms  | data research, concepts, potentials, economic preview for the "Stadtwerke Bath"  | Stadt Barth                     | 1992          |
| <b>Energy Concept<br/>Preetz</b>              | Preetz<br>Schleswig-Holstein              | energetic property cadastre and detail studies for municipal properties, cogeneration at the wastewater treatment plant   | data research, concepts, potentials, recommendations   | Stadt Preetz                    | 1992          |

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|--|--|--|---|--|---------------|
| <b><i>Energy Concept Lübeck</i></b>      | Stadt Lübeck<br>Schleswig-Holstein               | energy saving potentials for municipal properties as part of the energy concept Lübeck   | data research, concepts, potentials, recommendations  | Stadt Lübeck   | 1992          |
| <b><i>Energy Concept Stuhr/Weyhe</i></b> | Stuhr / Weyhe<br>Niedersachsen                   | strategies for CO2-savings, overtaking the power supply, economic preview, potentials for district heating and cogeneration  | data research, concepts, potentials, recommendations  | Gemeinden<br>Stuhr und<br>Weyhe                                | 1991<br>-1992 |
| <b><i>Energy Concept Ratekau</i></b>     | Ratekau<br>Schleswig-Holstein                    | energy- and emission balance, energetic cadastre for municipal properties, wind and water power utilization  | data research, concepts, potentials, economical evaluations, recommendations, consultations | Gemeinde<br>Ratekau  | 1991          |
| <b><i>Energy Concept Wustrow</i></b>     | Gemeinde Wustrow<br>Mecklenbg.-Vorp.             | energy and emission balance, heat atlas, district heating with cogeneration, utilization of geothermic energy, wind and solar energy   | data research, concepts, potentials, economical evaluations, recommendations                | Gemeinde<br>Wustrow  | 1991          |
| <b><i>Energy Concept Rostock</i></b>     | Hansestadt Rostock<br>Mecklenburg-<br>Vorpommern | designation of priority areas for gas supply and district heating, inventory, development of energy scenarios, future development of pipe-based heating systems, identification of CHP potentials, energy savings in public properties | data research, concepts, potentials, economical evaluations, recommendations                | Stadt<br>Bremen/Stadt-<br>werke Bremen<br>mit EU-<br>Förderung | 1990<br>-1991 |
| <b><i>Energy Concept Halstenbek</i></b>  | Halstenbek<br>Schleswig-Holstein                 | Energy servicees by the energy company, identification of CHP potentials, district heating systems, solar energy   | data research, concepts, potentials, economical evaluations, recommendations                | Gemeinde<br>Halstenbek   | 1990          |
| <b><i>Energy Concept Uetersen</i></b>    | Uetersen<br>Schleswig-Holstein                   | energy- and emission balance, energetic cadastre for municipal properties, district heat and CHP potentials, renewable energies  | data research, concepts, potentials, economical evaluations, recommendations                | Stadt Uetersen   | 1990          |

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|---|--------------------------------------|--|---|-----------------------------|---------------|
| <b><i>Energy Concept<br/>Land Bremen</i></b>      | Land Bremen                          | energy saving potentials in buildings (building typology), estimation of district heat potentials, CHP-potentials, exemplary cogeneration plants in industry, emission balance             | calculating moduls of the Bremen energy concept, data research, analysis, calculations, recommendations           | Land Bremen,<br>Umweltsenat | 1989<br>-1990 |
| <b><i>Energy Concept<br/>Meldorf</i></b>          | Meldorf<br>Schleswig-Holstein        | energy- and emission balance, forecast, energetic cadastre for municipal properties, district heat and CHP potentials, renewable energies, consultations, starting own municipal utilities | data research, concepts, potentials, economical evaluations, recommendations                                      | Gemeinde<br>Meldorf         | 1989          |
| <b><i>Energy Concept<br/>Landkreis Verden</i></b> | LK Verden<br>Niedersachsen           | energy demand in residential, with consumers and industry, heat atlas, district heating potentials, CHP concept for a wastewater treatment plant   | data research, concepts, potentials, economical evaluations, recommendations                                      | Landkreis<br>Verden         | 1989          |
| <b><i>Energy Concept<br/>Wedel</i></b>            | Wedel (Holst.)<br>Schleswig-Holstein | detailed data research, energy potentials, emission balances, tariffs  | data research, concepts, potentials, economical evaluations, recommendations, in cooperation with IFEU/Heidelberg | Stadtwerke<br>Wedel         | 1987<br>-1988 |